

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

July 22, 2009

Board of Land
and Natural Resources
Honolulu, Hawaii

Request for Amendment to Papahānaumokuākea Marine National Monument Research Permit
PMNM-2009-044, Previously Approved for Dr. Brian Bowen of the University of Hawaii,
Hawaii Institute of Marine Biology, to Add Additional Reef Fish Species and Locations

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval by the Board, to amend the Papahānaumokuākea Marine National Monument research permit previously approved for Dr. Brian Bowen, Associate Reseracher, Hawaii Institute of Marine Biology, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter 13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

AMENDMENT REQUEST:

The research permit amendment would make two primary changes to the current permit. The first would be the addition of Mokumanamana as a collection site for those species currently permitted, as well as those proposed to be added via this request. The second would be the addition of collections at deep reef sites (40-80m depth) for eight fish species. Six of these species are included on the current permit for collection at shallow reef sites. The other two species (Three-spot Chromis and Yellowfish Soldierfish) are new, therefore both shallow and deep reef areas are being requested.

These changes are being requested due to the finalization of the cruise itinerary for the NOAA Ship HI'IALAKAI, the vessel on which this work would occur, and the approval of other permitted activities to take place on that cruise. Specifically, the itinerary now includes a stop at Mokumanamana, and thus the opportunity to collect samples in the vicinity of a probable population genetic break. In addition, Dr. Kosaki's recently approved permit application (PMNM-2009-038) allows for deep (trimix) diving, and therefore an opportunity for collections to be made in areas that are rarely accessed. These data would shed light on the level of connectivity between shallow and deep reefs.

Fish species being request were selected by the P.I. and Richard Pyle (Bishop Museum), based on videotapes of deep reefs and the experience of Dr. Pyle. The criteria were the same as for shallow reef species: abundant, common, widespread. Videotape documents that these species number in the thousands on deep reefs of the lower Hawaiian Islands, so that the impact of collections will be miniscule and undetectable.

Dr. Brian Bowen's current permit, PMNM-2009-044, was approved by the Board at its regular meeting on April 24, 2009. See attachment F-5b.

STAFF OPINION:

DAR staff is of the opinion that the amendment request would add value to the currently permitted research, without significant impact to resources of the NWHI State waters, and should be approved.

MMB OPINION:

The MMB is of the opinion that the amendment request would add value to the currently permitted research, without significant impact to Monument resources, and should be approved.

RECOMMENDATION:

"That the Board authorize and approve the amendment to Research Permit PMNM-2009-044, approved by the Board on April 24, 2009, to Dr. Brian Bowen, Hawaii Institute of Marine Biology."

Respectfully submitted,



DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL



LAURA H. THIELEN
Chairperson

PERMIT PMNM-09-044 REVISION REQUEST
Brian W. Bowen, P.I.
July 1, 2009

A revision is requested to permit PMNM-2009-044 to reflect the evolving plans for the August-September (HI-09-06) research cruise. The revision is focused on two requested changes.

1) Add Mokumanamana (Necker) as a collecting site for all species. The draft itinerary for HI-09-06, issued in the last 48 hours, includes a stop at this site. Some species show a population genetic break between Kauai and French Frigate Shoals, but the location of this barrier is uncertain. For this reason, sampling at Mokumanamana (and Nihoa, already permitted) will be invaluable for defining isolated ecosystems in the Monument.

2) Allow collections at deep reef sites (40 – 80 meters depth) for eight fish species. In the months approaching this expedition, research plans evolved to include limited deep (trimix) diving, under permit PMNM-2009-038 to Dr. Randall Kosaki. Our requested revision is intended to collect specimens of fishes that occur in the deep and shallow habitats. To make maximum use of precious specimens, most fish on this list have already been collected in shallow water (Hawaiian Dascyllus, Milletseed Butterflyfish, Hawaiian Bigeye) or will be collected this year in shallow water (Goldring bristletooth, Hawaiian Chromis). For two other species we need to collect both shallow and deep specimens (Three-spot Chromis and Yellowfish Soldierfish), necessitating a sample size of 60 (30 shallow, 30 deep) per location. The Whittailed Chromis is a deep reef endemic that will allow comparisons between deep reefs (N=30/location), to assess the same connectivity issues that pertain to shallow reefs and form the management rationale for permit PMNM-2009-044.

The conservation motivation for this research is compelling, in keeping with research mandates of Presidential Proclamation 8031. We now know that coral reefs extend from the surface to at least 150 meters depth, and the deep reefs may serve as refugia for depleted shallow reefs (1-30 meter depth). In these circumstances, managers need to know the level of connectivity (migration) between shallow and deep reefs, both in the depleted reefs of the main Hawaiian Islands, and the more pristine reefs of the Monument. This research need has long been recognized, but until recently the technology wasn't available to allow safe diving below 40 meters depth. Cruise HI-09-06 will use limited trimix diving, under the permit issued to Dr. Randall Kosaki, at six locations to determine the scope of deep reefs in the Monument. Here we seek a limited fish collection to produce maximum conservation dividends from this very rare window of access.

Fish species were selected by the P.I. and Richard Pyle (Bishop Museum), based on videotapes of deep reefs and the experience of Dr. Pyle. The criteria were the same as for shallow reef species: abundant, common, widespread. Videotape documents that these species number in the thousands on deep reefs of the lower Hawaiian Islands, so that the impact of collections will be miniscule and undetectable.

Deep diving is permitted only for six locations, corresponding to Nihoa, Mokumanamana, French Frigate Shoals, Pearl and Hermes, Midway, and Kure. The requested specimens from deep (40-80 meters) reefs are listed below, and a revised Appendix 1 is attached including these fishes and requested collections at Mokumanamana.

DEEP/SHALLOW REEF COLLECTIONS (proposed additions to Appendix 1)

Common name	Scientific name	No., Size, Locations
Family Pomacentridae		
Hawaiian Chromis	<i>Chromis ovalis</i>	30 all sizes Nihoa 30 all sizes Mokumanamana 30 all sizes French Frigate Shoals 30 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Whitetailed Chromis	<i>Chromis leucura</i>	30 all sizes Nihoa 30 all sizes Mokumanamana 30 all sizes French Frigate Shoals 30 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Three-spot Chromis	<i>Chromis verater</i>	60 all sizes Nihoa 60 all sizes Mokumanamana 60 all sizes French Frigate Shoals 60 all sizes Pearl and Hermes 60 all sizes Midway 60 all sizes Kure
Hawaiian Dascyllus	<i>Dascyllus albisella</i>	30 all sizes Nihoa 30 all sizes Mokumanamana 30 all sizes French Frigate Shoals 30 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Family Chaetodontidae		
Milletseed Butterflyfish	<i>Chaetodon miliaris</i>	30 all sizes Nihoa 30 all sizes Mokumanamana 30 all sizes French Frigate Shoals 30 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Family Acanthuridae		
Goldenring bristletooth	<i>Ctenochaetus strigosus</i>	30 all sizes Nihoa 30 all sizes Mokumanamana 30 all sizes French Frigate Shoals 30 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Family Priacanthidae		
Hawaiian Bigeye	<i>Priacanthus meeki</i>	30 all sizes Nihoa 30 all sizes Mokumanamana 30 all sizes French Frigate Shoals 30 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Family Holocentridae		
Yellowfin Soldierfish	<i>Myripristis chryseres</i>	60 all sizes Nihoa 60 all sizes Mokumanamana 60 all sizes French Frigate Shoals 60 all sizes Pearl and Hermes 60 all sizes Midway 60 all sizes Kure



Dr. Brian Bowen
University of Hawaii at Manoa
Hawaii Institute of Marine Biology
46-007 Lilipuna Road
Kaneohe, Hawaii 96744

ORIGINAL

MAY 21 2009

Dear Dr. Bowen,

The National Oceanic and Atmospheric Administration, the U.S. Fish and Wildlife Service, and the State of Hawaii have approved the issuance of permit number PMNM-2009-044 to conduct activities within the Papahānaumokuākea Marine National Monument ("Monument") for research purposes. Activities are to be conducted in accordance with the permit application and all supporting materials submitted to the Monument, and the terms and conditions of permit number PMNM-2009-044 attached.

Your permit contains specific special conditions and reporting requirements. Please review them closely and fully comply with them while undertaking permitted activities. Permits are not valid until signed by the permittee and filed at this office.


If you have any questions about this permit please contact Justin Rivera at (808) 694-3919, Danielle Carter at (808) 694-3947 or Ray Born at (808) 792-9488. Thank you for your continued cooperation with NOAA, the U.S. Fish and Wildlife Service, and the State of Hawaii.

5/19/09

Laura H. Thielen
Chairperson
Board of Land and Natural Resources
Department of Land and Natural Resources
State of Hawaii

Date

Papahānaumokuākea
Marine National Monument
6600 Kalanianaʻole Hwy
Suite 300
Honolulu, HI 96825



Susan White
Superintendent U.S. Fish and Wildlife Service
Papahānaumokuākea Marine National Monument

5/11/09

Date



5/21/09

T. 'Aulani Wilhelm
Superintendent (NOAA)
Papahānaumokuākea Marine National Monument

Date

PAPAHĀNAUMOKUĀKEA
MARINE NATIONAL MONUMENT
RESEARCH PERMIT

ORIGINAL

MAY 21 2009



Permittee:
Dr. Brian Bowen
University of Hawai'i at Mānoa
Hawai'i Institute of Marine Biology
46-007 Lilipuna Road
Kaneohe, Hawai'i 96744

Permit Number: PMNM-2009-044
Effective Date: June 1, 2009
Expiration Date: October 31, 2009

Project Title: University of Hawai'i at Mānoa, Hawai'i Institute of Marine Biology, Reef Fish Genetic Survey Research

This permit is issued for activities in accordance with Proclamation 8031 ("Proclamation") establishing the Papahānaumokuākea Marine National Monument ("Monument") under the Antiquities Act of 1906, 16 USC §§ 431-433 ("Antiquities Act") and implementing regulations (50 CFR Part 404). All activities must be conducted in accordance with the Proclamation and the regulations (attached). No activity prohibited by the Proclamation or 50 CFR Part 404 is allowed except as specified below. Chapter 13-60.5, Hawaii Administrative Rules remains in effect for proposed activities in State waters.

Subject to the terms and conditions of this permit, the National Oceanic and Atmospheric Administration (NOAA), the State of Hawai'i, and the U.S. Fish and Wildlife Service (collectively, the Co-Trustees) hereby authorize the permittee listed above to conduct research activities within the Monument. All activities are to be conducted in accordance with this permit. The permit application is incorporated into this permit and made a part hereof; provided, however, that if there are any conflicts between the permit application and the terms and conditions of this permit, the terms and conditions of this permit shall be controlling.

PERMITTED ACTIVITY DESCRIPTION:

The following activities are authorized by this permit:

1. The permittee and the following roles are authorized to enter the Papahānaumokuākea Marine National Monument and conduct activities under this permit: 16 Research Diver and Collectors (names to be selected from the following list): Randy Kosaki, Robert Toonen, Stephen Karl, Matthew Craig, Zoltan Szabo, Toby Daly Engel, Tonatiuh Trejo, Jeff Eble, Kimberly Tenggardjaja, Michelle Gaither, Kelvin Gorospe, Jill Zamzow, Ben Wainwright, Carl Meyer, Matthew

Papahānaumokuākea
Marine National Monument
6600 Kalaniana'ole Hwy
Suite 300
Honolulu, HI 96825

Iacchei, Derek Skillings, Michael Stat, Xavier Ponchon, Yannis Papastamatiou, Luiz Rocha, Elizabeth Keenan, Jennifer Salerno, Megan Hugget, Daniel Wagner, Jon Puritz, and Greg Concepcion.

2. Swimming, snorkeling, and closed or open SCUBA diving within any Special Preservation Area and the Midway Atoll Special Management Area necessary to support research activities covered under this permit.
3. Possession and use of pole-spears for the purpose of collecting reef fish specimens.
4. Removing, moving, taking, or attempting to remove, move, or take reef fish as follows:

<u>Common name</u>	<u>Scientific name</u>	<u>No., Size, Locations</u>
Family Acanthuridae		
Goldring bristletooth	<i>Ctenochaetus strigosus</i>	30 all sizes Nihoa 30 all sizes French Frigate Shoals 30 all sizes Gardner Pinnacles 30 all sizes Maro Reef 30 all sizes Laysan 30 all sizes Lisianski 30 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Blue Spine surgeonfish	<i>Naso unicornis</i>	10 all sizes Nihoa 10 all sizes French Frigate Shoals 10 all sizes Gardner Pinnacles 10 all sizes Maro Reef 10 all sizes Laysan 10 all sizes Lisianski 10 all sizes Pearl and Hermes 10 all sizes Midway 10 all sizes Kure
MAXIMUM OF 50 FISH TOTAL		
Family Chaetodontidae		
Oval butterflyfish	<i>Chaetodon lunulatus</i>	30 all sizes Nihoa 1 all sizes French Frigate Shoals 30 all sizes Gardner Pinnacles 30 all sizes Maro Reef 27 all sizes Laysan 22 all sizes Lisianski 0 all sizes Pearl and Hermes 0 all sizes Midway 0 all sizes Kure
Family Labridae		
Ornate wrasse	<i>Halichoeres ornatissimus</i>	5 all sizes Nihoa 0 all sizes French Frigate Shoals 25 all sizes Gardner Pinnacles 30 all sizes Maro Reef 28 all sizes Laysan

	30 all sizes Lisianski 0 all sizes Pearl and Hermes 0 all sizes Midway 0 all sizes Kure
Yellowtail coris <i>Coris gaimard</i>	29 all sizes Nihoa 0 all sizes French Frigate Shoals 30 all sizes Gardner Pinnacles 30 all sizes Maro Reef 30 all sizes Laysan 30 all sizes Lisianski 29 all sizes Pearl and Hermes 30 all sizes Midway 30 all sizes Kure
Slow wrasse <i>Coris venusta</i>	26 all sizes Nihoa 0 all sizes French Frigate Shoals 29 all sizes Gardner Pinnacles 30 all sizes Maro Reef 0 all sizes Laysan 27 all sizes Lisianski 0 all sizes Pearl and Hermes 0 all sizes Midway 0 all sizes Kure
Blacktail wrasse <i>Thalassoma ballieui</i>	23 all sizes Nihoa 0 all sizes French Frigate Shoals 0 all sizes Gardner Pinnacles 30 all sizes Maro Reef 0 all sizes Laysan 11 all sizes Lisianski 0 all sizes Pearl and Hermes 0 all sizes Midway 0 all sizes Kure
Family Scaridae Spectacled parrotfish <i>Chlorurus perspicillatus</i> MAXIMUM OF 50 FISH TOTAL	10 all sizes Nihoa 10 all sizes French Frigate Shoals 10 all sizes Gardner Pinnacles 10 all sizes Maro Reef 10 all sizes Laysan 10 all sizes Lisianski 10 all sizes Pearl and Hermes 10 all sizes Midway 10 all sizes Kure
Bullethead parrotfish <i>Chlorurus spilurus</i> MAXIMUM OF 50 FISH TOTAL (formerly <i>C. sordidus</i>)	10 all sizes Nihoa 10 all sizes French Frigate Shoals 10 all sizes Gardner Pinnacles 10 all sizes Maro Reef 10 all sizes Laysan 10 all sizes Lisianski 10 all sizes Pearl and Hermes 10 all sizes Midway 10 all sizes Kure
Regal parrotfish <i>Scarus dubius</i>	10 all sizes Nihoa

MAXIMUM OF 50 FISH TOTAL

10 all sizes French Frigate Shoals
10 all sizes Gardner Pinnacles
10 all sizes Maro Reef
10 all sizes Laysan
10 all sizes Lisianski
10 all sizes Pearl and Hermes
10 all sizes Midway
10 all sizes Kure

Ember parrotfish *Scarus rubroviolaceus*
MAXIMUM OF 50 FISH TOTAL

10 all sizes Nihoa
10 all sizes French Frigate Shoals
10 all sizes Gardner Pinnacles
10 all sizes Maro Reef
10 all sizes Laysan
10 all sizes Lisianski
10 all sizes Pearl and Hermes
10 all sizes Midway
10 all sizes Kure

Palenose parrotfish *Scarus psittacus*
MAXIMUM OF 50 FISH TOTAL

10 all sizes Nihoa
10 all sizes French Frigate Shoals
10 all sizes Gardner Pinnacles
10 all sizes Maro Reef
10 all sizes Laysan
10 all sizes Lisianski
10 all sizes Pearl and Hermes
10 all sizes Midway
10 all sizes Kure

Family Pomacentridae
Hawaiian Sargeant *Abudefduf abdominalis*

30 all sizes Nihoa
30 all sizes French Frigate Shoals
30 all sizes Gardner Pinnacles
30 all sizes Maro Reef
30 all sizes Laysan
30 all sizes Lisianski
30 all sizes Pearl and Hermes
30 all sizes Midway
30 all sizes Kure

Indo-Pacific Sargeant *Abudefduf vaigiensis*

30 all sizes Nihoa
30 all sizes French Frigate Shoals
30 all sizes Gardner Pinnacles
30 all sizes Maro Reef
30 all sizes Laysan
30 all sizes Lisianski
30 all sizes Pearl and Hermes
30 all sizes Midway
30 all sizes Kure

Hawaiian Chromis *Chromis ovalis*

30 all sizes Nihoa
30 all sizes French Frigate Shoals
30 all sizes Gardner Pinnacles
30 all sizes Maro Reef
30 all sizes Laysan
30 all sizes Lisianski

	30 all sizes Pearl and Hermes
	30 all sizes Midway
	30 all sizes Kure
Vanderbilt's Chromis <i>Chromis vanderbilti</i>	30 all sizes Nihoa
	30 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	30 all sizes Pearl and Hermes
	30 all sizes Midway
	30 all sizes Kure
Family Blenniidae	
Scarface blenny <i>Cirripectes vanderbilti</i>	15 all sizes Nihoa
	15 all sizes French Frigate Shoals
	15 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	11 all sizes Laysan
	12 all sizes Lisianski
	13 all sizes Pearl and Hermes
	0 all sizes Midway
	0 all sizes Kure
Fangblenny <i>Plagiotremus goslinei</i>	14 all sizes Nihoa
	7 all sizes French Frigate Shoals
	15 all sizes Gardner Pinnacles
	15 all sizes Maro Reef
	15 all sizes Laysan
	15 all sizes Lisianski
	15 all sizes Pearl and Hermes
	3 all sizes Midway
	7 all sizes Kure
Fangblenny <i>Plagiotremus ewaensis</i>	15 all sizes Nihoa
	14 all sizes Gardner Pinnacles
	14 all sizes Laysan
	15 all sizes Maro Reef
	15 all sizes Lisianski
	15 all sizes Pearl and Hermes
	11 all sizes Midway
	11 all sizes Kure
Family Mullidae	
Yellowstripe goatfish <i>Mulloidichthys flavolineatus</i>	30 all sizes Nihoa
	8 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	30 all sizes Pearl and Hermes
	0 all sizes Midway
	7 all sizes Kure
Yellowfin goatfish <i>Mulloidichthys vanicolensis</i>	30 all sizes Nihoa
	6 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles

	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	3 all sizes Pearl and Hermes
	0 all sizes Midway
	0 all sizes Kure
Manybar goatfish <i>Parupeneus multifasciatus</i>	30 all sizes Nihoa
	0 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	0 all sizes Pearl and Hermes
	0 all sizes Midway
	0 all sizes Kure
Sidespot goatfish <i>Parupeneus pleurostigma</i>	30 all sizes Nihoa
	22 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	29 all sizes Pearl and Hermes
	0 all sizes Midway
	0 all sizes Kure
Family Lutjanidae	
Blueline snapper (ta'ape) <i>Lutjanus kasmira</i>	30 all sizes Nihoa
	30 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	30 all sizes Pearl and Hermes
	30 all sizes Midway
	30 all sizes Kure
Blacktail snapper <i>Lutjanus fulvus</i>	30 all sizes Nihoa
	30 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	30 all sizes Pearl and Hermes
	30 all sizes Midway
	30 all sizes Kure
Family Serranidae	
Peacock hind (roi) <i>Cephalopholis argus</i>	14 all sizes Nihoa
	30 all sizes French Frigate Shoals
	30 all sizes Gardner Pinnacles
	30 all sizes Maro Reef
	30 all sizes Laysan
	30 all sizes Lisianski
	30 all sizes Pearl and Hermes
	30 all sizes Midway
	30 all sizes Kure

5. Collection and archiving of tissue specimens of less than one gram weight from apex predators captured during tagging studies by Carl Meyer and colleagues.
6. Collection of biological voucher specimens that cannot be visually identified on the spot and/or may represent new geographic records or new species. A maximum of five specimens/species is permitted at each island or atoll.
7. Operation of small boats for permitted activities number 2 through 6.

No further disturbance of the cultural or natural resources of the Monument is allowed.

PERMITTED ACTIVITY LOCATIONS:

Other than entrance into the Monument, the permitted activities listed above are allowed at the following locations:

1. Nihoa Island Special Preservation Area
2. Necker Island (Mokumanamana) Special Preservation Area
3. French Frigate Shoals Special Preservation Area
4. Gardner Pinnacles Special Preservation Area
5. Maro Reef Special Preservation Area
6. Laysan Island Special Preservation Area
7. Lisianski Island Special Preservation Area
8. Pearl and Hermes Atoll Special Preservation Area
9. Midway Special Management Area
10. Kure Atoll Special Preservation Area.

GENERAL TERMS AND CONDITIONS:

In accordance with the Proclamation and applicable regulations, the permitted activities listed above are subject to the following general terms and conditions:

1. The permittee must sign and date this permit on the appropriate line below. Once signed and dated, the permittee must provide a signed original copy to the Monument official identified below. The permit becomes valid on the date the last Monument official signs the permit and shall remain valid for not more than one (1) year from that date.

Permit Coordinator
Papahānaumokuākea
Marine National Monument
6600 Kalanianaʻole Hwy. Suite 300
Honolulu, HI 96825

2. This permit is neither transferable nor assignable and must be carried by the permittee while engaging in any activity authorized by this permit. All other persons entering the Monument under the authority of this permit must provide the name of the permittee or the permit number to any authorized enforcement or management personnel upon request.
3. This permit may only be modified by written amendment approved by the Co-Trustees. Modifications to this permit must be requested in the same manner as the original request was made. Any modifications requested by the permittee, such as adding or changing personnel to be covered by the permit or to change the activities that are allowed, must be made in writing.
4. This permit is subject to suspension, modification, non-renewal, or revocation for violation of the Proclamation, implementing regulations, or any term or condition of the permit. Any verbal notification of a violation from an authorized Monument representative may require immediate cessation of activities within the Monument. The issuance of a permit shall not constitute a vested or property right to receive additional or future permits. This permit may, in the sole discretion of the Co-Trustees, be renewed or reissued. However, there is no right to a renewal or re-issuance. Failure to fulfill permit requirements may affect consideration of future permit applications.
5. Permit terms and conditions shall be treated as severable from all other terms and conditions contained in this or any other ancillary permit. In the event that any provision of this permit is found or declared to be invalid or unenforceable, such invalidity or unenforceability shall not affect the validity or enforceability of the remaining terms or conditions of this permit.
6. This permit does not relieve the permittee of responsibility to comply with all federal, state and local laws and regulations. Activities under this permit may be conducted only after any other permits or authorizations necessary to conduct the activities have been obtained.
7. The permittee may be held liable for the actions of all persons entering the Monument under the authority of this permit.
8. All persons entering the Monument under the authority of this permit are considered under the supervision of the permittee and may be liable in addition to the permittee for any violation of this permit, the Proclamation and implementing regulations in conjunction with this permit. The permittee must ensure that all such persons have been fully informed of the permit terms and conditions prior to entry into the Monument. Each such person must provide written acknowledgment to the permittee, prior to entry into the Monument, that he/she has received a copy of the permit, agrees to abide by all applicable terms and conditions, and may be liable for violations of the permit. The permittee shall

maintain all signed acknowledgments and submit them with the summary report described in General Condition #22.b.

9. Notification of entry into the Monument must be provided at least 72 hours, but no longer than one month, prior to the entry date. Any updates to the list of personnel must also be provided at least 72 hours before entering the Monument. Notification of departure from the Monument must be provided within 12 hours of leaving the Monument. Notification may be made via e-mail, or telephone by contacting: E-mail: nwhi.notifications@noaa.gov; Telephone: 1-866-478-6944; or 1-808-395-6944. No other methods of notification will be considered valid.
10. The permittee and any person entering the Monument under the authority of this permit shall, before entering the Monument, attend a cultural briefing or view designated cultural informational materials on Papahānaumokuākea regarding the region's cultural significance and Native Hawaiians' spiritual and genealogical connection to the natural and cultural resources. Persons entering the Monument at Midway Atoll may satisfy this requirement upon arrival.
11. All vessels (including tenders and dive boats), engines and anchor lines shall be free of introduced species prior to entry into the Monument. To ensure this, all vessels, engines and anchor lines shall be inspected for potential introduced species prior to departing the last port before entering the Monument. No later than 24 hours prior to entry, the permittee shall provide the Monument Permit Coordinator with a report prepared by the individual conducting the inspection that: a) sets forth when and where the inspection occurred; b) identifies any introduced species observed, including where found; c) summarizes efforts to remove any species observed; and d) certifies the vessel as free of all introduced species. The Monument Permit Coordinator shall review the report and, based on the review, may delay the entry into the Monument until all concerns identified by the Monument Permit Coordinator have been addressed.
12. All hazardous materials, biohazards and sharps, must be pre-approved by the Co-Trustees. For purposes of this permit, "hazardous material" has the same meaning as the definition found at 49 CFR §105.5 (U.S. Department of Transportation). All hazardous materials, biohazards and sharps must be stored, used, and disposed of according to applicable laws and Monument-approved protocols. The permittee, or a designated individual entering the Monument under the authority of this permit must be properly trained in the use and disposal of all such materials proposed. Proof of appropriate training may be required by the Co-Trustees. No such material may be left in the Monument after the departure of the permittee unless it has been previously approved by Monument staff. Immediately after the project is complete the permittee must remove all such materials from the Monument. The permittee will be responsible for all costs associated with use, storage, transport, training, disposal, or HazMat response for these materials.

13. All equipment or supplies brought into the Monument, or structures of any kind built in the Monument by the permittee are the responsibility of the permittee. All materials that are brought to the Monument by the permittee must be removed by the permittee except as otherwise permitted. Any permanent structures, equipment, or supplies that require maintenance, are determined to be unserviceable, or are a safety hazard, must be immediately repaired or removed from the Monument by the permittee. No structures, equipment, or supplies may be left in the Monument following the completion of the project except as listed in the permit.
14. If Monument staff are present at the field site, the permittee must meet with them before beginning permitted activities. Even with a valid permit, authorized Monument staff may prohibit entry into any location(s) within the Monument as they may deem appropriate to conserve or manage resources, particularly in areas where cumulative impacts of permitted activities are concentrated.
15. In order to facilitate monitoring and compliance, any person entering the Monument under the authority of this permit, including assistants and ship's crew shall, upon request by authorized Monument enforcement personnel, promptly: a) allow access to and inspection of any vessel or facility used to carry out permit activities; b) produce for inspection any sample, record, or document related to permit activities, including data, logs, photos, and other documentation obtained under, or required by, this permit; and c) allow inspection on board the vessel or at the permittee's premises of all organisms, parts of organisms, and other samples collected under this permit.
16. It is prohibited to possess or consume alcohol on any National Wildlife Refuge, other than Midway Atoll in accordance with refuge regulations. Any violations will result in immediate removal of the offender from the Monument at the individual's own cost. Offenders may not be readmitted to the Monument.
17. All persons entering the Monument under the authority of this permit are responsible for the cost of removing themselves from the Monument at the conclusion of the term of the permit or upon revocation or suspension of the permit. All such persons are also responsible for the cost of removing themselves from the Monument in the event of a necessary medical evacuation, emergency evacuation, including weather, or for the cost of any necessary search and rescue operation.
18. Except as expressly required by applicable law, the Co-Trustees are not liable for any damages to equipment or injuries to the permittee and persons entering the Monument under the authority of this permit. The permittee and any person entering the Monument under the authority of this permit shall release, indemnify, and hold harmless the National Oceanic and Atmospheric Administration, the Department of Commerce, the U.S. Fish and Wildlife Service, the Department of the Interior, the United States Government, the State of Hawai'i, and their

respective employees and agents acting within the scope of their duties from and against any claims, demands, actions, liens, rights, subrogated or contribution interests, debts, liabilities, judgments, costs, and attorney's fees, arising out of, claimed on account of, or in any manner predicated upon the issuance of this permit or the entry into or habitation upon the Monument or as the result of any action of the permittee or persons participating in the activity authorized by this permit. In the event that a government employee, acting in his official capacity, is the permittee, or is entering the Monument under the authority of this permit, then he shall be subject to all applicable federal and State laws that pertain to claims by or against him predicated upon the issuance of this permit or entry into or habitation upon the Monument.

19. Monument managers or their designees may verbally require the permittee to modify or cease activities not identified in this permit if, in the opinion of the managers or designees, such action is necessary to limit disturbance to or protect Monument resources, to protect government equipment, or to ensure the safety of personnel. After providing such verbal instructions, the managers or designees will provide the permittee with a written modification, suspension or revocation to this permit at the earliest practicable opportunity. The failure to follow verbal instructions or modified permit terms, or to cease activities upon suspension or revocation of this permit, may constitute a violation of this permit, the Proclamation, the regulations, or other applicable law.
20. Disturbance of any cultural or historic property, including but not limited to Native Hawaiian cultural sites, burials, archaeological deposits, and WWII structures and features, such as stone walls and mounds, stone uprights, bunkers, batteries, camp sites, hospitals, housing areas, and radio towers; or the disturbance or collection of any historic or cultural materials and artifacts, including but not limited to bottles, dishes, cartridges, hospital materials, carvings, human remains, or Native Hawaiian bone or stone implements, found within the Monument, including the sale or trade in such items, is prohibited.
21. All Monument resources within the jurisdiction of the State of Hawai'i are held in trust under the Hawai'i State Constitution, Article XI, Sec. 1. The State of Hawai'i and the Government of the United States reserve ownership or control, as the case may be, of Monument resources, both living and nonliving, that may be taken or derived from those found in the Monument.
22. The permittee must satisfy the following reporting requirements:
 - a. For activities on State lands or within State waters, the permittee must submit a monthly report on the specified form.
 - b. The permittee must maintain a cruise log including, but not limited to: anchoring locations and small boat dive locations. The log must contain a description of cruise activities and the geographic locations of those activities. Within thirty (30)

days after the end of the cruise or the expiration date of this permit, the permittee must submit the cruise log and a summary report of activities conducted under this permit. The permittee having authority over the vessel must maintain a daily vessel discharge log, which must be submitted with the cruise log.

- c. Annual Report. The comprehensive annual report is a summary of all activities undertaken, including but not limited to: dates of all arrivals and departures from islands and atolls within the Monument, names of all persons involved in permitted activities, details of all specimens collected, handled, etc., any other pertinent information, GPS locations of all samples collected, transects, etc., results of work to date, copy of all data collected, and a proposed schedule of publication or production of final work. The report shall include a concise summary or abstract for use in Monument reports. Two hard copies and one electronic copy (Microsoft Word preferred, but not required), must be submitted to the Co-Trustees. The annual report is due by the end of the second week of January of the calendar year that follows the year that the permit was in effect or before a new permit is issued, whichever comes first. Subsequent annual reports are required each year until all data collected under research permits are fully analyzed.
 - d. The permittee must debrief the Co-Trustees following the completion of all activities in the Monument covered under this permit. The permittee must schedule the debriefing upon submitting the annual report.
 - e. The permittee must submit two copies of any article, publication, or other product created as a result of the information gained or work completed under this permit, including materials generated at any time in the future following expiration of this permit.
 - f. Any publications and/or reports resulting from activities conducted under the authority of this permit must include the notation that the activity was conducted under permit number PMNM-2009-044. This requirement does not apply to publications or reports produced by the news media.
 - g. All required submissions (including plans, logs, reports, and publications) shall be provided to the Monument official at the address indicated in General Condition #1.
23. All data acquired or created in conjunction with this permit will be submitted with the summary report, and annual report. Photographic and video material is considered data. The permittee retains ownership of any data, (including but not limited to any photographic or video material), derivative analyses, or other work product, or other copyrightable works, but the Federal Government and the State of Hawai'i retain a lifetime, non-exclusive, worldwide, royalty-free license to use the same for government purposes, including copying and redissemination, and making derivative works. The permittee will receive acknowledgment as to its

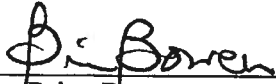
ownership of the data in all future use. This requirement does not apply to data acquired or created by the news media.

24. Because photographic or video material that is created for personal use (i.e., not specifically acquired or created in conjunction with this permit) could unintentionally collect data that is also valuable for management purposes, the Co-Trustees reserve the right to request copies of any such material and the permittee agrees to provide a copy of such material within a reasonable time. The Co-Trustees may use such material for management purposes.
25. Any question of interpretation of any term or condition of this permit will be resolved by the Co-Trustees.

SPECIAL TERMS AND CONDITIONS:

1. This permit is not to be used for nor does it authorize the sale of collected organisms. Under this permit, the authorized activities must be for noncommercial purposes not involving the use or sale of any organism, by-products, or materials collected within the Monument for obtaining patent or intellectual property rights.
2. The permittee may not convey, transfer, or distribute, in any fashion (including, but not limited to, selling, trading, giving, or loaning) any coral, live rock, or organism collected under this permit without the express written permission of the Co-Trustees.
3. The transport of live organisms is prohibited. In addition, to prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocols attached to this permit.
4. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
5. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge.
6. No fishing is allowed in State Waters except as authorized under State law for subsistence, traditional and customary practices by Native Hawaiians.

Your signature below, as permittee, indicates that you accept and agree to comply with all terms and conditions of this permit. This permit authorizes only those activities listed above. This permit becomes valid on the date when signed by the last Monument Official. Please note that the expiration date on this permit will not be extended by a delay in your signing below.




Dr. Brian Bowen
University of Hawai'i at Mānoa
Hawai'i Institute of Marine Biology

6/9/09
Date

Attachments (7):

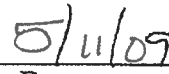
1. Proclamation 8031, June 15, 2006
2. 50 CFR Part 404
3. Hawaii Administrative Rules 13-60.5
4. Permit Acknowledgement Form
5. Maps of the Papahānaumokuākea Marine National Monument
6. Disease and Introduced Species Prevention Protocol
7. Sampling and Transport Protocol



Laura H. Thielen
Chairperson
Board of Land and Natural Resources
Department of Land and Natural Resources
State of Hawaii




Date



Susan White
Superintendent
U.S. Fish and Wildlife Service
Papahānaumokuākea Marine National Monument

Date



T. 'Aulani Wilhelm
Superintendent (NOAA)
Papahānaumokuākea Marine National Monument

5/21/09

Date